

## **BC INTERNATIONAL CORPORATION**

www.bcintlcorp.com

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**Company Description:** BC International is a privately held company based in Dedham, Massachusetts. We apply our landmark patented and proprietary biotechnology to produce ethanol from cellulosic biomass (such as sugarcane residue, rice straw, corn stover, other agricultural waste and forest thinnings). BCI's technology achieves high ethanol yields at low cost (waste feedstock, location advantages), and BCI's process is more advanced than those of its biomass-to-ethanol competitors.

The technology has been demonstrated in two pilot plants. BCI plans to expand its business through the ownership and operation of ethanol production facilities, joint ventures and domestic and international licensing of its technology. BCI is currently developing its first plant in Louisiana, using sugar cane residue (bagasse) as a feedstock, and its next two plants in northern California, using rice straw and wood wastes. BCI also has a technology transfer arrangement with Marubeni for the application of its technology in Asia.

**Key Project/Asset Equipment:** BCI's first industrial-scale facility will be located in south central Louisiana. This facility will process bagasse from local sugar mills to produce 30 million gallons per year of ethanol. The ethanol will be sold primarily to fuel marketers and oil companies serving the East Coast, Texas and Louisiana.

**Key Challenges:** The three main interrelated challenges are: (i) funding the parent company while simultaneously (ii) pursuing closure of the project financing of not only a single project (which always has project specific issues), but (iii) one which is the "first-of-its-kind" in its field – it includes a new technology.

Challenges have been exacerbated by: (a) the biotech/energy divide, (b) being both a "high tech" and "low tech" company, (iii) the divide between corporate and project equity investors (although we can use either corporate or project money to fund the project), and (iv) the desire of corporate investors for a 'first mover' advantage vs. the desire of project investors for successful precedents.

Notwithstanding 3+ years of successful pilot plant performance and almost 50 patents, we need to show that returns from the first plant are at market and that large entities stand behind performance. (In practice, the tech platform and "learning curve" effects should result in lower capital and operating costs for subsequent plants.)

**Key Approaches Utilized:** Many approaches have been tried over the years (tax-exempt debt//private placement /private equity/complicated EPC contract with financial holdbacks). The problem has been equity more than debt. We are currently organizing a world-class group of three major contractors/subcontractors to collectively provide sole-source turnkey credit support

for construction. With this construction group we expect substantial cost improvement as well as further substantiation of our credibility and the market opportunity for a pending \$15 million corporate equity raise. A portion of these funds will pay for engineering necessary for the EPC contract and other project-specific arrangements (feedstock, offtake, licenses, etc.).

## **Example Diagram:**

## **BC International's Jennings Facility**

